AMENDMENT TO THE CLAIMS

1. (currently amended) A mobile gravel sorter, which is arranged to move in a direction of travel along a road, comprising

a gathering unit ~~(20)~~ which is arranged to gather up granular material from a roadway as the gravel sorter moves in the direction of travel,

a sorting unit ~~(30)~~ for sorting and supplying to the roadway the amount of the material that is smaller than a given grain size, which sorting unit comprises a substantially circular drum which is arranged after the gathering unit in the direction of travel and which has a centre axis ~~(32)~~, an inlet means in connection with the gathering unit ~~(20)~~ and an outlet means which is arranged in connection with ~~the~~ a collecting unit ~~(40)~~ and separated from the inlet means in the longitudinal direction of the drum,

~~a~~ the collecting unit ~~(40)~~ for collecting material exceeding said given grain size, and a screen cloth means ~~(37)~~ which is arranged to cover openings in the circumferential surface of the drum, characterised in

that the sorting unit ~~(30)~~ further comprises at least one screw conveyor ~~(34, 35)~~ which extends in the drum between the inlet means and the outlet means about a helical axis which is substantially concentric with the centre axis ~~(32)~~ of the drum,

that ~~the main elements of~~ the screw conveyor ~~comprise~~ comprises at least one radially directed flange ~~(34, 35)~~ which describes a helical line inside the drum,

that the radially directed flange of the screw conveyor in the radial direction has an extension that is smaller than the inner radius of the drum and extends from the inside of the circumferential surface of the drum so that an axially directed return chamber forms about the centre axis ~~(32)~~ between the inlet and outlet means of the drum,

that the projection of the centre axis ~~(32)~~ of the drum on the roadway is directed substantially parallel to the direction of travel of the gravel sorter, the inlet means mainly consisting of an open drum end, which is the front end in the direction of travel, and the outlet means mainly consisting of an open drum end, which is the rear end in the direction of travel, and

that the centre axis ~~(32)~~ of the sorting unit ~~(30)~~ is inclined in relation to the horizontal plane so that its front end is lower than its rear end.

2. (original) A gravel sorter as claimed in claim 1, in which the drum and the screw conveyor rotate together.

3. (currently amended) A gravel sorter as claimed in claim 1, in which the circumferential surface of the drum mainly consists of said screen cloth means ~~(37)~~.

4. (currently amended) A gravel sorter as claimed in claim 1, in which the sorting unit comprises a supporting, rotating shaft ~~(32)~~ which is concentric with the centre axis of the drum and which supports the screw conveyor and the drum.

5. (currently amended) A gravel sorter as claimed in claim 1, in which the inclination of the centre axis ~~(32)~~ of the sorting unit ~~(30)~~ is about 20° in relation to the horizontal plane.

6. (currently amended) A gravel sorter as claimed in claim 2, in which the circumferential surface of the drum mainly consists of said screen cloth means ~~(37)~~.

7. (currently amended) A gravel sorter as claimed in claim 2, in which the sorting unit comprises a supporting, rotating shaft ~~(32)~~ which is concentric with the centre axis of the drum and which supports the screw conveyor and the drum.

8. (currently amended) A gravel sorter as claimed in claim 3, in which the sorting unit comprises a supporting, rotating shaft ~~(32)~~ which is concentric with the centre axis of the drum and which supports the screw conveyor and the drum.

9. (currently amended) A gravel sorter as claimed in claim 2, in which the inclination of the centre axis ~~(32)~~ of the sorting unit ~~(30)~~ is about 20° in relation to the horizontal plane.

10. (currently amended) A gravel sorter as claimed in claim 3, in which the inclination of the centre axis ~~(32)~~ of the sorting unit ~~(30)~~ is about 20° in relation to the horizontal plane.

11. (currently amended) A gravel sorter as claimed in claim 4, in which the inclination of the centre axis ~~(32)~~ of the sorting unit ~~(30)~~ is about 20° in relation to the horizontal plane.